

# Manual

## 1. Get to know your DV (camera)

### 1.1 Features

3.1 Mega pixels resolution sensor  
Digital video camcorder  
Digital still camera  
Built-in flash Light  
TV output  
1.5" LTPS real color display  
Internal 16MB flash memory and SD card support  
Driver free for Windows 2000/ME/XP/Vista and MAC 9.x and X.x  
Macro mode

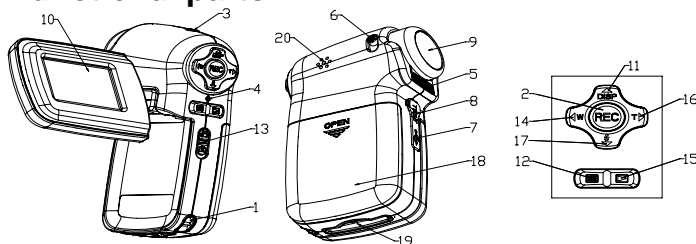
### 1.2 Specifications

Sensor		3.1 Mega pixel CMOS sensor
Image resolution	DC	12.0 Mega pixels: (4032x3024) (Hardware Interpolation)
		8.0 Mega pixels: (3264x2448) (Hardware Interpolation)
		5.0 Mega pixels: (2560x1920) (Hardware Interpolation)
		3.1 Mega pixels: (2048x1536)
		2.0 Mega pixels (1600x1200)
		1.3 Mega pixels: (1280x960)
	DV	VGA: (640x480)
		VGA (640x480) QVGA (320x240)
Lens		F/2.8 f=8.5mm
Focus range		0.5m. ~ Infinity
Macro mode		11cm – 18cm
Digital zoom		8x
Flash strobe		Built-in (Auto/force/off)
LCD display		1.5" real color LTPS TFT
White balance		Auto/Daylight/cloudy/Tungsten/Fluorescent
DV mode		Up to 30fps@VGA (Use SD card)
Built-in memory		16MB Flash memory
Picture Capacity in 16M memory (The quantity of pictures varies and depends on the complexity of the scene)	DC	VGA: (640x480) --133Pictures
		1.3M: (1280x960) -- 63Pictures
		2.0 Mega pixels (1600x1200) -- 45Pictures
		3.1M: (2048x1536) -- 31 Pictures
		5.0M: (2560 x 1920) -- 26 Pictures
		8.0M: (3264x2448) -- 18 Pictures
	DV	12M: (4032x3024) --12 Pictures
		VGA 25S
		QVGA 46S
External memory card		SD card supports up to 2GB
File format		Picture: JPEG, Video: AVI,
Self timer		2/10/10+2 seconds
PC interface		USB 1.1
TV-out		NTSC/PAL
Power source		3xAAA alkaline batteries.

### 1.3 System requirement

Operating System	Windows 2000/ME/XP/Vista or above
CPU	Mac 9.x or X.x
RAM	Pentium II or above
Interface	At least 64MB
CD	USB port
	4x speed CD ROM or above

## 2. Functional parts:



1	Strap hook	Hook for attaching the wrist strap to the camera.
2	REC	Press this button to take photographs or start/stop recording a video clip. And Press it to confirm changes.
3	Power on/off button	Press this button to turn on, press again to turn off.
4	Busy LED	When the indicator is light, the camera is busy.
5	Flash light	Use the built-in flash to give the subject extra lighting if it is in dark surroundings (the best flash distance is recommended within 1.5m.).
6	Macro switch	<b>Macro mode:</b> Select this mode to take close-up photographs (distance 11cm - 18cm). <b>Normal mode:</b> Select this mode to take photographs from 0.5m - infinity
7	USB interface	Via this connection, you can download photographs and video clips to a computer.
8	AV port	For television connection.
9	Lens	Records the image to be taken. <b>Note:</b> Keep the lens clean. Dirt and fingerprints will affect the quality of the picture.
10	LCD screen	Display photographs, video clips, camera setting and menu.
11	UP / display	UP and LCD display on / off
12	Menu	For camera setting.
13	Mode	Slide it to select different mode.
14	Left	For menu LEFT selection & Digital zoom in..
15	Playback	Press it to enter playback mode.
16	Right	For menu right selection & Digital zoom out.
17	Down /flash light	Down and selection of flash light mode
18	Battery door	3xAAA alkaline batteries
19	SD card slot	SD card slot.
20	Speaker	Speaker

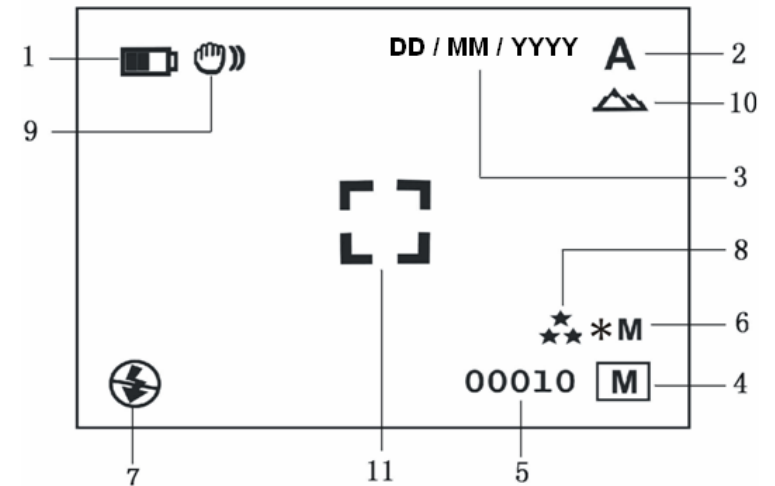
## 3. Details for DV (camera) setting

SET	DC (Camera) Capture	Size	12M pixel resolution 8.0M pixel resolution 5.0M pixel resolution 3.1M pixel resolution 2.0M pixel resolution 1.3M pixel resolution VGA resolution	4032 x 3024 3264 x 2448 2560 x 1920 2048 x 1536 1600 x 1200 1280 x 960 640 x 480
		Quality	Fine(Default)/Standard/ Economy	Picture quality set
SET	DC (Camera) Capture	Scene mode	Auto(Default)/Sport/Night/ Portrait/Landscape/Backlight	Scene set
		Exposure value	+/-2, +/-5/3, +/-4/3, +/-2/3, +/-1/3 +/-1, 0(Default)	Level of exposure
SET	DC (Camera) Capture	White balance	Auto (Default) Daylight Cloudy Tungsten Fluorescent	Automatic white balance White balance selected for daylight surrounding White balance selected for cloudy surrounding White balance selected for tungsten lighting White balance selected for fluorescent surrounding
		ISO	Auto(Default)/100/200	Sensitivity select
SET	DC (Camera) Capture	Color	Standard (Default) / Vivid / Sepia / Monochrome	Color setting
		Saturation	Normal(Default) / High / Low	Saturation setting
SET	DC (Camera) Capture	Sharpness	Normal(Default) / Hard /Soft	Sharpness setting
		Self timer	2s 10s 10+2s	Set the delay time at 2s to take a picture Set the delay time at 10s to take a picture Set the delay time at 10s to take a picture, and then every 2s to take pictures automatically.
SET	DC (Camera) Capture	Date Input	Off(Default)/Set	DD,MM,YYYY
		Time Stamp	Off(Default)/Date Only/Date & Time	Show the date and / or time on the pictures
SET	DC (Camera) Capture	Burst	Off(Default)/On	Press Shutter key to take three photos.
		Size	VGA QVGA	640 x 480 320 x 240
SET	DV (Video output)	Exposure value	+/-2, +/-5/3, +/-4/3, +/-2/3, +/-1/3 +/-1, 0(Default)	Level of exposure
		White balance	Auto (Default) Daylight Cloudy Tungsten Fluorescent	Automatic white balance White balance selected for daylight surrounding White balance selected for cloudy surrounding White balance selected for tungsten lighting White balance selected for fluorescent surrounding







Setup	Format	Execute/cancel	Format the memory card.
	Language	English(Default)/T-Chinese/ S-Chinese/French/German/ Italian/Spanish/Portuguese	Select display language
	Auto power off	1/3/5 min and Off	Auto power off in 1min, 3min(default) or 5 min if no operation
	Sys. Reset	Execute/cancel	Restore default setting
	Light-Frequency (Flicker)	50Hz 60Hz	Main European electricity frequency Main American electricity frequency
	TV- Out	NTSC PAL	American and Japanese video format European video format.

**Note:** The camera will remain the last setting when it is turned off.

## 4. Explanation of the status icons



Item	Function	Description
1	Battery indicator	The batteries are full. The batteries are empty.
2	Recording mode	<b>A</b> Setting for photographs taking Setting for videos capture
3	Date stamp	Displays the date day/month/year
4	Memory or SD card indicator	Indicates memory or SD card <b>M</b> : Pictures stored in built-in memory : Pictures stored in SD card
5	Photo / Video counter	Photo mode :No. of balance picture can be taken; Video mode: Balance of recording time in second; Playback mode: The No. of pictures or video file.

6	Selected Resolution	12M= 4032x3024 8M= 3264x2448 5M= 2560x1920; 3.1M = 2048x1536; 2M= 1600x1200 1.3M= 1280x960; VGA= 640x480; QVGA= 320x240
7	Flash indicator	 : Force flash.  A: <b>Auto Flash:</b> The camera determines if the flash must be used or not.  : <b>No Flash:</b> The flash is turned off.
8	Picture quality	☆☆ The quality is fine (Default). ☆☆ The quality is standard. ★ The quality is economy.
9	Brightness Alert	 Alert user to hold the camera steadily.
10	Normal / Macro mode indicator	 Normal mode (0.5m – infinity)  Macro mode (11cm –18cm)
11	View center	

## 5. Using the DV(camera)

### 5.1 Installing the batteries

- Open the battery door.
- Insert3x AAA alkaline batteries into the camera.
- Turn on the DV (camera).  
Press the POWER button or open the LCD panel to turn on it.

### 5.2 Inserting a memory card (not included)

This DV (camera) has built-in internal memory. This memory can be extended with a SD memory card (not included).

Follow the instructions given below to insert the optional SD memory card into the camera.

- Turn off the camera first.
- Insert the SD card into the camera.

**Note:** There is only one right direction to insert the SD memory card into the slot. Do not force the card into the slot, or else it may damage both the camera and the SD memory card.

**Note:** The SD memory card must be formatted before taking photographs. See the following sections for more information.

### 5.3 Formatting the memory or SD card

- Press Menu button
- Select Setup setting by Menu key.
- Press REC to confirm and select by up or down key.
- Press REC to format the card or memory.

### 5.4 Setting the resolution

The DV (camera) can be set to different resolutions.





- Press MENU to set proper resolution.

Resolution: VGA ( 640 x 480 ) , 1.3M (1280 x 960) , 2.0M (1600 x 1200) ,

3.1M (2048 x 1536), 5M (2560 x 1920), 8M (3264 x 2448), 12M (4032 x 3024)

- Different resolutions will be displayed. Select the desired resolution by using the ▲ or ▼ buttons and then press the REC button to confirm the selection.

### 5.5 Taking Video or photographs

- Turn on the DV (camera) .
- Slide MODE to set the DV to photo mode (A) or mode().
- Depending on the distance to the object being photographed, use Macro switch to adjust the distance. Select the flower symbol () if you wish to take a close-up photograph (11cm –18cm).  
If you wish to take Video or photograph of surroundings or people (0.5m - infinity), set the Macro switch to Normal mode (▲).
- If you are not sure if there is enough lighting, turn the automatic flash () on by pressing the flash button (▼/ ).
- Use the LCD screen to aim the object you wish to take video or photograph.
- Press REC button.

**Caution:** 1) Taking picture for fast-moving object is not recommended.  
2) Image may be distorted when taking picture in a moving vehicle.

### 5.6 Zoom in and out

The DV can zoom in up to 8 times.


Zoom in or out by pressing the ◀ or ▶ button, a number will appear on the display. 8.0 is the maximum zoom.

### 5.7 Taking photographs using self-timer function

You can use the self-timer function when you wish to take a photograph for yourself or when you wish to photograph for an object where the camera must be as still as possible.

- Set the camera to photo mode.
- Press the MENU button. The quick menu will appear.
- Press ▼ to self-timer mode, press REC and ▲or ▼ to set the delay time: 2seconds / 10 seconds / 10+2seconds or off.
- Press the REC button to confirm. The self-timer function is now ready for use.
- Aim at the object you wish to photograph.
- Press the REC button to take a photograph.
- The photograph will be taken after the timer reaches the delay time that you pre-set, and the camera will beep once.

### 5.8 Playback photographs

- Press  button to playback mode, and ▲ or ▼ to select the video clip or photo.
- Press,◀or ▶ to zoom the image.
- Press MENU to select SLIDE SHOW, and then press REC to confirm. The pictures saved in your camera or your SD card will be displayed in sequence automatically.

### 5.9 Playback video clips

- When video clips are displayed, press REC to play, and press DOWN key to stop.
- Press REC to pause the playback
- Press Playback to exit.

### 5.10 Delete photographs and video clips

Follow the instructions given below to delete photograph or video.

- Press PLAYBACK to enter Playback mode.
- Press the MENU button and select Delete Single/Delete All, press REC to confirm.
- If you select Protect picture, your current file or images can not be deleted.
- Press MENU to exit.



**NOTE:** Select 'Deleting All' and Press REC to confirm, all the pictures will be deleted.

## 6. Connecting the DV (camera)

The camera can be connected to the computer as Mass Storage Device,

**NOTE:** Under the environment with electrostatic discharge, the sample may malfunction and memory lost. It requires user re-install the battery to reset the sample.

## 7. Trouble shooting

Problem	Cause	Solution
Cannot turn on the DV (camera) by opening the LED panel.	Low battery power. Battery placed at wrong polarities.	Replace or install the battery correctly. Try to open the DV (camera) by pressing the power button.
Photos can not be saved when taking pictures.	The memory card or built-in memory hasn't been formatted properly.	Format the memory in SETUP mode of the camera. Please refer to section 5.3.
Cannot find removable disk after connecting the camera to the computer.	Connection failure.	Make sure all cable connections are secured and restart the computer if necessary.
Flash does not work.	Battery Power is too low.	Replace with new ALKALINE battery.
The batteries used up very fast.	Use wrong type of battery.	Replace with new ALKALINE battery.
The photos are over exposure	Set the flash light to force mode  in bright environment.	Set the Flash light to Auto mode  .
The video photos are blurry	1. The DV (camera) is not held steadily 2. The lens of DV (camera) is dirty. 3. The DV (camera) is Set to wrong macro mode.	1. Hold the DV (camera) steadily until it beeps when taking video photo. 2. Clean the lens with soft dry cloth. 3. Set the macro mode according to the distances of subject.



For EU only

AM-DV310-AGB-CLV-R